

3. (Not Amended) The current source switching circuit according to claim 2, further comprising:

a load connected between a ground and a second side of said transistor switch.

4. (Not Amended) The current source switching circuit according to claim 3, wherein:

said load is a charging capacitor.

5. (Not Amended) The current source switching circuit according to claim 1, wherein said transistor switch comprises:

a MOS transistor.

6. (Not Amended) The current source switching circuit according to claim 1, wherein said transistor switch comprises:

a first serial combination of a functional MOS transistor with a first compensating transistor connected to a source of said functional MOS transistor and a second compensating transistor connected to a drain of said functional MOS transistor.

7. (Not Amended) The current source switching circuit according to claim 6, wherein said transistor switch further comprises:

a second serial combination of a complementary functional MOS transistor with a first complementary compensating transistor connected to a source of said complementary functional MOS transistor and a second complementary compensating transistor connected to a drain of said complementary functional MOS transistor.

Sub H1
8. (Amended) The current source switching circuit according to claim 1, wherein said [pulling] pull-down mirror path comprises:
a pull-down amplifier.

9. (Not Amended) The current source switching circuit according to claim 8, wherein:

said pull-down amplifier is configured as a voltage follower to have an output which follows a current source side of said switch.

Sub H2
10. (Amended) The current source switching circuit according to claim 8, further comprising:

a complementary pull-down mirror path transistor switch, said complementary pull-down mirror path transistor switch being adapted for operation opposite to that of said transistor switch.

Sub G3
11. (Amended) The current source switching circuit according to claim 10, wherein said complementary pull-down mirror path transistor switch comprises:

a series combination of a functional transistor with a respective compensating transistor connected to either side of said functional transistor.

12. (Not Amended) The current source switching circuit according to claim 2, wherein said current source comprises:

a MOS transistor.

Sub H1
13. (Amended) The current source switching circuit according to claim 1, wherein said [pulling] pull-down mirror path comprises:
a pull-up amplifier.

14. (Not Amended) The current source switching circuit according to claim 13, further comprising:

a current source connected between a ground and a first side of said transistor switch.

15. (Amended) The current source switching circuit according to claim [13]2, further comprising:

a current sink connected between a ground and a second side of said transistor switch.

16. (Not Amended) The current source switching circuit according to claim 15, wherein said current sink comprises:

a MOS transistor.

17. (Amended) The current source switching circuit according to claim 16, wherein said current source switching circuit comprises:

a charged capacitor.

18. (Amended) A method of reducing charge injection from a current source through a current switch into a load, said method comprising:

providing a pull-down mirror path in parallel with said current switch;

turning a switch in said pull-down mirror path on when said current switch is turned off; and

turning said switch in said pull-down mirror path off when said current switch is turned on[.]

wherein said current switch and said pull-down mirror path operate substantially continuously to reduce charge injection flowing to said load.

19. (Not Amended) The method of reducing charge injection from a current source through a current switch into a load according to claim 18, wherein:

said current source is a MOS transistor.

20. (Not Amended) The method of reducing charge injection from a current source through a current switch into a load according to claim 18, wherein:

said current source is a charged capacitor.

Sub 3
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21. (Amended) A method of switching a current source out from a load, said method comprising:

opening a transistor switch connecting said current source to said load; and

substantially simultaneously with said step of opening, closing a switch to a pull-down mirror path in parallel with said transistor switch so that current from said current source flows through said pull-down mirror path;

wherein said load substantially continuously receives said current flowing from said current source to reduce charge injection from said current source to said load when said transistor switch is opened[is greatly reduced].

22. (Amended) Apparatus for switching a current source out from a load, comprising:

means for opening a transistor switch connecting said current source to said load; and

means for closing a switch to a pull-down mirror path in parallel with said transistor switch at substantially simultaneously a same time as said means for opening opens said transistor switch so that current from said current source flows through said pull-down mirror path;

Amended

wherein said load substantially continuously receives said current
flowing from said current source and charge injection from said current source to
said load when said transistor switch is opened is [greatly] reduced.
